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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,942	04/16/2004	William C. To	7784-000728	1620

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EXAMINER
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JAKOVAC, RYAN J

ART UNIT	PAPER NUMBER
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2445

MAIL DATE	DELIVERY MODE
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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/826,942	<b>Applicant(s)</b> TO, WILLIAM C.	
	<b>Examiner</b> RYAN J. JAKOVAC	<b>Art Unit</b> 2445	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 May 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claim 1-22 have been considered but are not persuasive and/or moot in view of the new ground(s) of rejection.
2. Applicant argues in summary that the cited prior art does not disclose a server module and a browser module resident a portable computer. However, upon inspection of the Applicant's specification regarding what the Applicant deems a "server module". Accordingly the server module of the Applicant's invention simply formats data obtained from the aircraft element to be displayed by the web browser. Schmidt discloses software modules which obtain data from an aircraft element and subsequently, Schmidt discloses displaying that data in a web browser (Schmidt, fig. 2-3, col. 5-6, the portable computer connects to an aircraft element, retrieves data from the element, and subsequently sends the data for display in the interface of fig. 7. See also col. 8:55 through col. 9:30.). Further, formatting data for display in a web browser in this manner is well known to one of ordinary skill in the art at the time of the Applicant's invention (04/16/2004). This is evidenced by the disclosure of Gimbert in at least fig. 4 and the abstract which states that Gimbert "enables aircraft and aircraft engine information to be communicated to a user via a computer including a browser."
3. Applicant's invention is directed towards connecting a computer to an element, e.g. an element of an aircraft, retrieving data from the element, and displaying the data in a webpage. Under the heading "Summary of Invention", the Applicant's specification recites: "...a computer-implemented method of providing configuration management relative to an element

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includes connecting with and receiving data from the element, and formatting the data in one or more web pages.” (To, [0006]).

4. The Examiner’s cited prior art, US 20030217363 to Brady JR, and US 20030208579 to Brady JR also contemplate downloading information from a LRU (i.e. an aircraft component) to a download server (see abstract Brady JR '579) as well as using common gateway interface as is claimed by the Applicants current amendments. Brady JR in the '363 publication also contemplates the client and server on the same machine (Brady '363, [0046], In one possible embodiment, the network client 400 and the network server 450 are located on the same LRU (LRU A 100 in the embodiment of the seat-level part of the IFE system shown in FIG. 1a). It is an advantage of the system of the present invention that the network client 400 and the network server 450 may be located on the same LRU, since this improves the speed with which some functions of the IFE system are executed.). Further, Brady ‘363 discloses a machine comprising a web browser and a web server interfacing with aircraft components in at least fig. 2c.

5. The differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a

whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 3, 5, 9, 11, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,401,013 to McElreath in view of US 6,122,575 to Schmidt et al, and further in view of US 2003/0014426 to Gimbert et al (hereinafter Gimbert).

Regarding claim 1, 9, 11, 14, McElreath teaches an apparatus for performing configuration management relative to an aircraft, the apparatus comprising:

a portable computer having a processor and memory configured for connection with a plurality of components of the aircraft to retrieve data from one or more modules of the aircraft components (McElreath, abstract, a laptop is coupled to avionics equipment on-board the aircraft. See also fig. 1, laptop is connected to a plurality of aircraft components. See also col. 2:45-65, col. 3 to col. 4:52. See also Schmidt, col. 3:45 to col. 5:65, laptop is connected to the electronic control unit of an aircraft auxiliary power unit.); and

the processor and memory configured to, when the portable computer is operating standalone:

execute a web server module resident in the portable computer to include at least some of the retrieved data in one or more web page markups for providing a plurality of maintenance and/or engineering functions selectable by a user of the computer and performable via the computer as to one or more components of the aircraft (Gimbert, [0026-0028], received data is represented as a web page. Web pages display a plurality of selectable links (i.e. functions).); and

execute a web browser module resident in the portable computer and in communication with the server module to display the one or more web page markups as one or more web pages on a display of the portable computer, the method performed without accessing the internet (Schmidt, fig. 2-3, col. 5-6, the portable computer connects to an aircraft element, retrieves data from the element, and subsequently sends the data for display in the interface of fig. 7. See also col. 8:55 through col. 9:30. See also Gimbert, fig. 4., [0026-0028] and the abstract.)

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of McElreath with the teachings of Gimbert in order to enable aircraft information to be communicated to a user via a computer including a browser (Gimbert, abstract). It would have been further obvious to combine the teachings of McElreath and Gimbert with the teachings of Schmidt in order to be able to download information from an aircraft component and display the downloaded diagnostic information through an on screen interface (Schmidt, col. 5:20-50. See also fig. 7.).

Regarding claim 3, The combination of McElreath, Gimbert, and Schmidt teaches the apparatus of claim 1, the computer further comprising a configuration file resident in the computer for holding the received data, the server module executable by the processor to process data from the configuration file for inclusion in the one or more web page markups (Gimbert, [0026-0028], received data is represented as a web page. See also the abstract, system enabling aircraft and aircraft engine information to be communicated to a user via a computer including a browser. See also fig. 4-5.).

Regarding claim 5, The combination of McElreath, Gimbert, and Schmidt teaches the apparatus of claim 4, further comprising a script executable by the processor through the server to activate the construct processing module (Gimbert, [0026-0028], server renders web pages. See also, Abstract.) .

8. Claims 4 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of McElreath, Gimbert, and Schmidt, in further view of US 2003/0217363 to Brady, JR. et al (hereinafter Brady 363).

Regarding claim 4, 13, the combination of McElreath, Gimbert, and Schmidt teaches the apparatus of claim 3, further comprising or more constructs included in the web page markups (Gimbert, [0026-0028], server renders web pages.), the computer further comprising a construct processing module configured with the server for execution by the processor to use the data from the configuration file to produce one or more web page markups (Gimbert, fig. 4-5.),

McElreath, Gimbert, and Schmidt do not expressly disclose the construct processing module configured to obtain data from the configuration file using a common gateway interface (CGI) of the server that does not interface with an internet.

However, Brady 363 discloses the construct processing module configured to obtain data from the configuration file using a common gateway interface (CGI) of the server that does not interface with an internet (Brady 363, [0009-0011], [0056], [0072], See also fig. 1a.).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of McElreath, Gimbert, Schmidt, and Brady 363 in order to control functions of an IFE system and associated LRUs (Brady 363, [0072], fig. 1a.).

9. Claims 2, 7, 8, 10, 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of McElreath, Gimbert, and Schmidt, in further view of US 2003/0208579 to Brady, JR. et al (hereinafter Brady).

Regarding claim 2, The combination of McElreath, Gimbert, and Schmidt teaches the apparatus of claim 1, wherein the maintenance and/or engineering functions comprise one or more of the following: a configuration management function, a software upgrade function, a health status function, and a troubleshooting function (Brady, abstract, software in line-replaceable units in an in-flight entertainment system (i.e. aircraft components) are updated in response to a user request.).

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Brady with the teachings of McElreath, Schmidt and Gimbert in order to be able to update the software in aircraft components such as line-replaceable units of an in-flight entertainment center (Brady, abstract.).

Regarding claim 8, 10, 15, 16, the combination of McElreath, Gimbert, and Schmidt teaches the apparatus of claim 1, the computer further operable to perform at least one of updating software included in at least one of the components of the aircraft, collecting



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performance data from at least one of the components of the aircraft, and operating a troubleshooting tool relative to at least one of the components of the aircraft (Brady, abstract, software in line-replaceable units in an in-flight entertainment system (i.e. aircraft components) are updated in response to a user request. See also fig. 7.).

Regarding claim 7, The combination of McElreath, Gimbert, and Schmidt teaches the apparatus of claim 3, but does not expressly disclose wherein the aircraft is included in a fleet managed via a network operations center.

However, these differences are only found in the nonfunctional descriptive material and are not functionally involved in the steps recited. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability. See *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the nonfunctional descriptive material with the claimed invention because such data does not functionally relate to the steps in the method claimed and because the subjective interpretation of the descriptive material does not patentably distinguish the claimed invention.

Brady discloses a network operations center, the computer further operable to deliver at least one of the data from the configuration file and the one or more web pages specific to a given one of the aircraft to the network operations center (Brady, fig. 1, management terminal.).

10. Claim 17, 19-21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt in view of Gimbert and further in view of Brady.

Regarding claim 17, 21, the combination of Schmidt and Gimbert teaches a method of providing configuration management relative to an aircraft, the method performed by a portable computer having a processor and a memory, the method comprising:

the processor causing the portable computer to access one or more components of an aircraft and to retrieve data from the one or more components in response to a user request (Schmidt, col. 5:20-50, in response to user instruction (i.e. request) data is retrieved from the aircraft component.);

the processor executing the web server module to dynamically format at least some of the data retrieved from the one or more aircraft components into one or more web page markups for display as one or more web pages via the browser module (Schmidt, fig. 2-3, col. 5-6, the portable computer connects to an aircraft element, retrieves data from the element, and subsequently sends the data for display in the interface of fig. 7. See also Gimbert, fig. 4. See also [0026-0028] and the abstract, received data is represented as a web page.);

the processor receiving user input via the browser module indicating a management function to be performed on at least one of the one or more aircraft components (Gimbert, [0026-0028], selectable links. [0038], user to navigate through the web page using a plurality of hyperlinks. [0031], web pages as enabling a user to access specific features associated with the user and to identify tasks performed within the system.); and

the processor causing software to be downloaded from the portable computer to the at least one of the one or more components in response to the user input (Brady, abstract, software in line-replaceable units in an in-flight entertainment system (i.e. aircraft components) are updated in response to a user request.).

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Schmidt and Gimbert in order to enable aircraft information to be communicated to a user via a computer including a browser (Gimbert, abstract). It would have been further obvious to combine the teachings of Brady with the teachings of Schmidt and Gimbert in order to be able to update the software in aircraft components such as line-replaceable units of an in-flight entertainment center (Brady, abstract.).

Regarding claim 19, the combination of Schmidt, Gimbert, and Brady discloses the method of claim 17, further comprising the processor displaying data describing (a) one or more hardware components of the aircraft and (b) software resident in the one or more hardware components (Brady, fig. 7.).

Regarding claim 20, the combination of McElreath, Gimbert, and Schmidt teaches the apparatus of claim 17, further comprising transferring data to the one or more aircraft components based on user input via one of the one or more web pages (Brady, abstract, software in line-replaceable units in an in-flight entertainment system (i.e. aircraft components) are updated in response to a user request. See also Gimbert [0026-0028]).

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11. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt in view of Gimbert in view of Brady, and further in view of Brady 363.

Regarding claim 22, the combination of Schmidt, Gimbert, Brady, and Brady 363 teaches the method of claim 17, wherein the formatting processor executing the web server module comprises the processor processing one or more constructs to include dynamic content in a web page, the processing performed using a construct processing module of the server to obtain the data via a common gateway interface (CGI), the CGI executable in the computer when the computer is standalone. (Brady 363, [0009-0011], [0056], [0072], See also fig. 1a.).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of McElreath, Gimbert, Schmidt, and Brady 363 in order to control functions of an IFE system and associated LRUs (Brady 363, [0072], fig. 1a.).

12. Claims 6, 12, are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of McElreath, Gimbert, and Schmidt, and further in view of Official Notice.

Regarding claims 6, 12, Official Notice is taken that using standard protocols such as CGI (to obtain data from a file) or SNMP (to retrieve data over a network) are well known. Regarding claim 18, obtaining the ping status of a network element is well known in the art.

13. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Schmidt, Gimbert, and Brady, and further in view of Official Notice.

Regarding claim 18, Official Notice is taken that obtaining the ping status of a network element and displaying the ping status of network element is well known in the art.

***Conclusion***

**14. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RYAN J. JAKOVAC whose telephone number is (571)270-5003. The examiner can normally be reached on Monday through Friday, 7:30 am to 5:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava can be reached on 571-272-7304. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ryan Jakovac/

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Supervisory Patent Examiner, Art Unit 2445